NPIC/TSSG/RED/SDB-003-70
8 January 1970

MEMORANDUM FOR: Chief, Exploratory Laboratory, RED/ATB

THROUGH : Chief, Advanced Technology Branch, RED

SUBJECT : Feasibility Study of Extended Fluorescent Viewing Surface

1. One of the problems encountered during the development of instruments with extended illuminated viewing surfaces such as light tables is an excessive gradient in intensity of illumination. It would be very desirable to achieve an illuminated surface of high intensity, with small gradient, and with minimum heating at the viewing surface.

2. One possible technique for achieving an illuminated surface of this character is by employing self-luminous phosphors at the surface and illuminating this phosphor with a UV source of energy. Of several known phosphors, two are particularly familiar in connection with another project and are apparently worthy of further consideration as a fluorescent viewing surface. One is a chelate phosphor and the other is the Blancophor S-1G4 phosphor.

3. It is requested that you theoretically investigate the feasibility of coupling an extended UV source with a self-luminous phosphor to provide an illuminated viewing surface. For further information 25X1 contact [redacted]

[redacted] 25X1
Chief, RED/SDB

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